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10/538,350	06/10/2005	Uwe Hildebrand	4114-17	1940
23117 7590 07/17/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
KHAN, MEHMOOD B				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,350

Applicant(s)

HILDEBRAND ET AL.

Examiner

MEHMOOD B. KHAN

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/24/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

- 35 USC § 101 – *Rejection has been removed.*
 - 35 USC § 112 – *Rejections for claims 1, 19, and 7 have been removed.*
- Rejection for claim 25 is maintained.*

Specification

The amendment filed 04/24/2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The Applicant has requested to Please amend the paragraphs beginning at page 12, line 1, and continuing to page 12, line 31. The amendment would change scope and insert new matter, by changing the figures from 1 to figure 5, and from figure 2 to figure 6.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

Applicant's arguments filed 04/24/2008 have been fully considered but they are not persuasive.

Applicant argues on page 21-22 of the remarks, the time gap does not form part of one of the first time frames and thus cannot be viewed as equivalent to the transmission gap in the sense of claim 1.

The Examiner respectfully disagrees. The time gaps are a part of the time frame. Ketseoglou clearly discloses in Fig. 26, that the conditional gap (1086) can form part of the time frame.

Applicant argues on page 22 of the remarks, that first time frames do not include any part which is not used for communications when using the first time frames as originally intended.

The Examiner respectfully disagrees. The first time frames include time slots which are a part of the time frame. It is clear to one of ordinary skill that communication occurs in time slots within a time frame.

Applicant argues on page 22 of the remarks, that Ketseoglou does not disclose the use of the first time frames separated by time gaps in combination with a control of the use of the first time frames in dependence of communications to be performed using second time frames.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., in combination with a control) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues on page 22 of the remarks, that "control of the use of the first communications resource...".

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., in combination with a control) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues on page 22 of the remarks, that Ketseoglou fails to teach the duration of the gaps is variable.

In this instance, the Examiner would like to state that the claim limitation states "controlling the use of the first communication resources by controlling at least one of a number and duration of the at least one transmission gap". Ketseoglou clearly discloses inserting time gaps (**Col 24: 41-46**). Furthermore, Ketseoglou clearly discloses the duration of the time gaps can be selected (**Col 24: 16-18**).

Hence the limitations are met by Ketseoglou and Rakib.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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3. Claim 25 recited the limitation "the second frequency range" in line 17 on page 13. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ketseoglou et al. (US 5,732,076 herein Ketseoglou) in view of Rakib et al. (US 5,793,759 herein Rakib).

Claim 1, Ketseoglou discloses a method for operating a first communications environment for which first communications resources (TG) are provided for communications according to a first communications standard type (**Col 3: 23-28, where Ketseoglou discloses a first protocol, i.e. a first communications environment using a first protocol**), Ketseoglou discloses using the first communication resources for communications according to the first communications standard type, using the first communications resources for communications according to a second communications standard type (**Col 3: 35-37, where Ketseoglou discloses a first and second protocol, It is well known ton one of ordinary skill in the art that cellular communications are enabled over resources, i.e. spectrum / time frames with time slots**), Ketseoglou discloses controlling the use of the first

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communications resources as being used for communications according to the first communications standard type in dependence of communications to be performed according to the second communications standard type **(Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol)**, communicating according to the first communications standard type by using a first frame structure including at least one transmission gap (TG) **(It is well known to one of ordinary skill in the art that a TDMA protocol and a spread spectrum protocol use different frame structures and guard time is used in a TDMA protocol)**, Ketseoglou discloses controlling the use of the first communication resources by controlling at least one of a number and duration of the at least one transmission gap (TG) **(Col 24: 41-46, where Ketseoglou discloses inserting time gaps between slots of both protocols)**.

Ketseoglou does not disclose using the at least one transmission gap (TG) for communications according to the second communications standard type.

In an analogous art, Rakib disclose using the at least one transmission gap (TG) for communications according to the second communications standard type **(Col 4: 49-51, where Rakib discloses transmission of timing signals for frame alignment in gaps between frames)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ketseoglou with the teachings of Rakib so as to reduce crosstalk **(Col 4: 45-46)**.

Claim 2, Ketseoglou discloses controlling the use of the first communications resources (TG) for communications according to the first communications standard type in dependence of communications to be performed according to the first communications standard type (**Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol**).

Claim 3, Ketseoglou discloses using second communications resources provided for communications according to the second communications standard type for communications according to the first communications standard type and controlling the use of the second communications resources for communications according to the second communications standard type in dependence of communications to be performed according to the first communications standard type (**Col 22: 52-62, where Ketseoglou discloses using time slots assigned to a protocol to be used by a different protocol depending on the number of users**).

Claim 4, Ketseoglou discloses communicating according to the second communications standard type by using a second frame structure (**Fig. 15: 926a and 926b, where Ketseoglou discloses different frames from different protocols creating a composite frame**), Ketseoglou discloses controlling the use of the second communications resource by controlling at least one of a number and a duration of at least a part of the second frame structure being used for communications according to

the second communications standard type **(Col 31: 56-60, where Ketseoglou discloses providing time slots for the use by the other protocol).**

Claim 5, Ketseoglou discloses controlling the use of the second communications resources for communications according to the second communications standard type in dependence of communications to be performed according to the second communications standard type **(Col 22: 33-43, Fig. 15: 926a and 926b, where Ketseoglou discloses time slots with respect to both communication protocols).**

Claim 6, Ketseoglou discloses wherein the first communications resources include a first frequency range **(Col 28: 19-22, Fig. 21: 985, where Ketseoglou discloses Group A frequencies).**

Claim 7, Ketseoglou discloses wherein the first frequency range and the second frequency range overlap at least partially **(Col 28: 23-28, where Ketseoglou discloses overlap).**

Claim 8, Ketseoglou discloses controlling the use of the first communications resources for a geographical area for which both communications according to the first communications standard type and communications according to the second communications standard type are provided **(Col 3: 23-29, where Ketseoglou discloses operation in the same or overlapping geographic region).**

Claim 9, Ketseoglou discloses available communications resources for communications according to the second communications standard type (**Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol, Col 31: 56-60, where Ketseoglou discloses providing time slots for the use by the other protocol**).

Claim 10, Ketseoglou discloses available communications resources for communications according to the first communications standard type (**Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol, Col 31: 56-60, where Ketseoglou discloses providing time slots for the use by the other protocol**).

Claim 11, Ketseoglou discloses providing the first communications resources as resources comprised by the first communications environment, which provides for communications according to the first communications standard type (**Fig. 15: 926a and 926b, where Ketseoglou discloses time slots used for both types of protocols**).

Claim 12, Ketseoglou discloses providing the first communications resources as resources comprised by the first communications environment, which provides for communications according to the first communications standard type (**Fig. 15: 926a**

and 926b, where Ketseoglou discloses time slots used for both types of protocols), Ketseoglou discloses providing the second communications resources as resources comprised by a second communications environment, which provides for communications according to the second communications standard type (Col 3: 23-28, where Ketseoglou discloses a second protocol, i.e. a second communications environment using a second protocol).

Claim 13, Ketseoglou discloses communicating information indicating available communications resources for communications according to the second communications standard type to the first communications resources so as to control the use of the first communications resources **(Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol, Col 31: 56-60, where Ketseoglou discloses providing time slots for the use by the other protocol).**

Claim 14, Ketseoglou discloses communicating information indicating available communications resources for communications according to the first communications standard type to the second communications resources so as to control the use of the second communications resources **(Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol, Col 31: 56-60, where Ketseoglou discloses providing time slots for the use by the other protocol).**

Claim 15, Ketseoglou discloses using the first communications resources for only communications according to the first communications standard type, or only communications according to the second communications standard type, or communications according to the first communications standard type and communications according to the second communications standard type **(Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol, Col 31: 56-60, where Ketseoglou discloses providing time slots for the use by the other protocol).**

Claim 16, Ketseoglou discloses using the second communications resources for only communications according to the first communications standard type, or only communications according to the second communications standard type, or communications according to the first communications standard type and communications according to the second communications standard type **(Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol, Col 31: 56-60, where Ketseoglou discloses providing time slots for the use by the other protocol).**

Claim 17, Ketseoglou discloses controlling the use of the first communications resources such that communications according to the first communications standard type are prioritized in relation to communications according to the second

communications standard type **(Col 32: 30-34, where Ketseoglou discloses prioritization)**.

Claim 18, Ketseoglou discloses controlling the use of the second communications resources such that communications according to the second communications standard type are prioritized in relation to communications according to the first communications standard type **(Col 32: 30-34, where Ketseoglou discloses prioritization)**.

Claim 19, Ketseoglou discloses a communications environment, being adapted to utilize first communications resources (TG) for communications according to a first communications standard type for communications according to a second communications standard type **(Col 3: 35-37, where Ketseoglou discloses a first and second protocol, It is well known ton one of ordinary skill in the art that cellular communications are enabled over resources, i.e. spectrum / time frames with time slots)**, Ketseoglou discloses to control the use of the first communications resources (TG) for communications according to the first communications standard type in dependence of communications to be performed according to the second communications standard type **(Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol)**, Ketseoglou discloses wherein the first communications resources comprise a first frame structure including at least one transmission gap (TG) **(It is well known to one of ordinary skill in the art**

that a TDMA protocol and a spread spectrum protocol use different frame structures and guard time is used in a TDMA and TDD protocol), Ketseoglou discloses wherein the communications environment is adapted to control the use of the first communications resources by controlling at least one of a number and duration of the at least one transmission gap (TG) (Col 24: 41-46, where Ketseoglou discloses inserting time gaps between slots of both protocols).

Ketseoglou does not disclose wherein the communications environment is adapted to control the use of the at least one transmission gap (TG) for communications according to the second communications standard type.

In an analogous art, Rakib discloses control the use of the at least one transmission gap (TG) for communications according to the second communications standard type **(Col 4: 49-51, where Rakib discloses transmission of timing signals for frame alignment in gaps between frames)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ketseoglou with the teachings of Rakib so as to reduce crosstalk **(Col 4: 45-46)**.

Claim 20, as analyzed with respect to the limitations as discussed in claim 2.

Claim 21, as analyzed with respect to the limitations as discussed in claim 3.

Claim 22, as analyzed with respect to the limitations as discussed in claim 4.

Claim 23, as analyzed with respect to the limitations as discussed in claim 5.

Claim 24, as analyzed with respect to the limitations as discussed in claim 6.

Claim 25, as analyzed with respect to the limitations as discussed in claim 7.

Claim 26, as analyzed with respect to the limitations as discussed in claim 8.

Claim 27, as analyzed with respect to the limitations as discussed in claim 9.

Claim 28, as analyzed with respect to the limitations as discussed in claim 10.

Claim 29, as analyzed with respect to the limitations as discussed in claim 11.

Claim 30, as analyzed with respect to the limitations as discussed in claim 12.

Claim 31, as analyzed with respect to the limitations as discussed in claim 13.

Claim 32, as analyzed with respect to the limitations as discussed in claim 14.

Claim 33, as analyzed with respect to the limitations as discussed in claim 15.

Claim 34, as analyzed with respect to the limitations as discussed in claim 16.

Claim 35, as analyzed with respect to the limitations as discussed in claim 17.

Claim 36, as analyzed with respect to the limitations as discussed in claim 18.

Claim 37, Ketseoglou discloses a radio base station for a communications environment being adapted to be operated according to the steps of claim 1 (**Fig. 13, where Ketseoglou discloses an integrated base station**).

Claim 38, Ketseoglou discloses a computer program product, comprising program code portions for carrying out the steps according to claim 1 (**Col 21: 14-22, where Ketseoglou discloses processors, it is well known to one of ordinary skill in the art that processors perform instructions based on computer program code**).

Claim 39, Ketseoglou discloses being stored on a computer readable storage medium or in a computer readable storage device (**Col 21: 14-22, where Ketseoglou discloses processors, Col 25: 22-29, where Ketseoglou discloses programming of time slots, it is well known to one of ordinary skill in the art that a processor is a computer readable storage device**).

Claim 40, Ketseoglou discloses wherein the second communications resources include a second frequency range (**Col 28: 23-28, Fig. 21: 981**).

Claim 41, as analyzed with respect to the limitations as discussed in claim 8.

Claim 42, as analyzed with respect to the limitations as discussed in claim 10.

Claim 43, as analyzed with respect to the limitations as discussed in claim 10.

Claim 44, Ketseoglou discloses providing the first communications resources and second communications resources as resources comprised by the first communications environment, which provides for both communications according to the first communications standard type and communications according to the second communications standard type (**Col 22: 52-62, where Ketseoglou discloses using time slots based on a greater number of users of a protocol, Col 31: 56-60, where Ketseoglou discloses providing time slots for the use by the other protocol**).

Claim 45, as analyzed with respect to the limitations as discussed in claim 40.

Claim 46, as analyzed with respect to the limitations as discussed in claim 10.

Claim 47, as analyzed with respect to the limitations as discussed in claim 10.

Claim 48, as analyzed with respect to the limitations as discussed in claim 44.

Claim 49, as analyzed with respect to the limitations as discussed in claim 8.

Claim 50, Ketseoglou discloses wherein the second communications resources include a second frequency range **(Col 28: 19-22, where Ketseoglou discloses different frequency groups)**.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MEHMOOD B. KHAN** whose telephone number is

(571)272-9277. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mehmood B. Khan/
Examiner, Art Unit 2617

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617